

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference <b>2003P01010WO</b>	<b>FOR FURTHER ACTION</b>		See item 4 below
International application No. <b>PCT/EP2004/053248</b>	International filing date ( <i>day/month/year</i> ) <b>02 December 2004 (02.12.2004)</b>	Priority date ( <i>day/month/year</i> ) <b>04 December 2003 (04.12.2003)</b>	
International Patent Classification (8th edition unless older edition indicated) <b>See relevant information in Form PCT/ISA/237</b>			
Applicant <b>BSH BOSCH UND SIEMENS HAUSGERÄTE GMBH</b>			

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 <i>bis</i> .1(a).																								
2.	This REPORT consists of a total of 7 sheets, including this cover sheet.  In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.																								
3.	<p>This report contains indications relating to the following items:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 10%; text-align: center;"><input checked="" type="checkbox"/></td> <td style="width: 30%;">Box No. I</td> <td style="width: 60%;">Basis of the report</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input checked="" type="checkbox"/>	Box No. VIII	Certain observations on the international application
<input checked="" type="checkbox"/>	Box No. I	Basis of the report																							
<input type="checkbox"/>	Box No. II	Priority																							
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability																							
<input type="checkbox"/>	Box No. IV	Lack of unity of invention																							
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement																							
<input type="checkbox"/>	Box No. VI	Certain documents cited																							
<input type="checkbox"/>	Box No. VII	Certain defects in the international application																							
<input checked="" type="checkbox"/>	Box No. VIII	Certain observations on the international application																							
4.	The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).																								

<p style="text-align: center;">The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No. +41 22 338 82 70</p>	<p>Date of issuance of this report <b>29 August 2006 (29.08.2006)</b></p> <hr/> <p>Authorized officer  <b>Agnes Wittmann-Regis</b></p> <hr/> <p>e-mail: pt06@wipo.int</p>
--	---

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:

**PCT**

**TRANSLATION**

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing (day/month/year) <b>See Form PCT/ISA/210 (sheet 2)</b>		
Applicant's or agent's file reference <b>2003P01010WO</b>		
<b>FOR FURTHER ACTION</b> See paragraph 2 below		
International application No. <b>PCT/EP2004/053248</b>	International filing date (day/month/year) <b>02.12.2004</b>	Priority date (day/month/year) <b>04.12.2003</b>
International Patent Classification (IPC) or both national classification and IPC <b>H05B3/42, A47J31/54, A47L15/42, D06F39/04, F24H1/10, H01 C7/02</b>		
Applicant <b>BSH BOSCH UND SIEMENS HAUSGERÄTE GMBH</b>		

1. This opinion contains indications relating to the following items:

<input checked="" type="checkbox"/>	Box No. I	Basis of the opinion
<input type="checkbox"/>	Box No. II	Priority
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input type="checkbox"/>	Box No. VII	Certain defects in the international application
<input checked="" type="checkbox"/>	Box No. VIII	Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/EP	Authorized officer
Facsimile No.	Telephone No.

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2004/053248

Box No. I

Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
☐ This opinion has been established on the basis of a translation from the original language into the following language  
\_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material  
☐ a sequence listing  
☐ table(s) related to the sequence listing
  - b. format of material  
☐ in written format  
☐ in computer readable form
  - c. time of filing/furnishing  
☐ contained in the international application as filed.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/EP2004/053248

**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Claims	<u>2, 3, 5-10, 12-21</u>	YES
	Claims	<u>1, 4, 11</u>	NO
Inventive step (IS)	Claims		YES
	Claims	<u>1-21</u>	NO
Industrial applicability (IA)	Claims	<u>1-21</u>	YES
	Claims		NO

**2. Citations and explanations:**

Reference is made to the following documents:

D1: US-B1-6 442 341 (WU CHIA-HSIUNG)  
27 August 2002 (2002-08-27)

D2: DE 198 52 888 A1 (BRAUN GMBH) 31 May 2000  
(2000-05-31)

D3: DE 71 32 663 U (ELPAG AG) 17 February 1972  
(1972-02-17)

D4: US-A-4 334 141 (ROLLER ET AL.) 8 June 1982  
(1982-06-08)

The present application does not meet the requirements of PCT Article 33(1) because the subject matter of claims 1, 4 and 11 is not novel within the meaning of PCT Article 33(2).

D4 discloses (the references between parentheses apply to this document):

A heating device for fluids for installation in a flow heater, with at least one heating element (5) designed as an electric resistance heater, at least one heat transfer element (1) which is connected in a heat-conducting

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2004/053248

Box No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement

manner to the heating element and the fluid in order to transfer the heat generated by the heating element, the heat transfer element forming an integral housing component of a pressure- and temperature-resistant flow heater having an essentially planar central region on which the heating element is mounted (figure 1; column 4, line 42 to column 5, line 10).

The subject matter of claim 1 is therefore not novel.

D2 likewise discloses (the references between parentheses apply to this document):

A heating device for fluids, the heating element being formed from a material with a positive temperature characteristic (column 4, line 42 to column 5, line 10).

A flow heater with a heating device and a moulded part, which is connected to the latter in a positive, pressure-resistant and thermally stable manner, in order to form a fluid space, the moulded part having at least one inlet opening and at least one outlet opening (column 4, line 42 to column 5, line 10).

The subject matter of claims 4 and 11 is therefore not novel.

For the sake of completeness, it is additionally emphasized that the subject matter of independent claim 1 is also not novel over the publication of D1, D2 or D3 (PCT Article 33(2)).

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2004/053248

Box No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement

The present application does not meet the requirements of PCT Article 33(1) because the subject matter of claims 2, 3 and 5 to 21 does not involve an inventive step within the meaning of Article 33(3).

Dependent claims 2, 3 and 5 to 10 concern minor structural modifications of the heating device according to claim 1 of the kind that a person skilled in the art routinely makes on the basis of familiar considerations, especially since the resulting advantages are readily foreseeable. Consequently, the subject matter of claims 2, 3 and 5 to 10 is not based on an inventive step.

The same reasoning also applies correspondingly to claims 11 to 21. The subject matter of claims 11 to 21 therefore does not involve an inventive step (PCT Article 33(3)).

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2004/053248

Box No. VIII      Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

Pursuant to PCT Rule 5.1(a)(ii), the description should have cited D1, D2, D3 and D4; the relevant prior art contained therein should be briefly outlined.

The expression '(PTC)' used in claim 4 is not a reference sign but rather is a particular feature. In consequence, it is unclear whether the features added to the reference sign limit the scope of the claim. Such features placed between parentheses are consequently generally inadmissible.